

FIG. 1A RLL CODE1 0 0 1 0 0 0 1 0 0 0 0 1 0 0 1

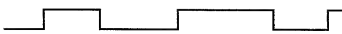
FIG. 1B WRITING SIGNAL 

FIG. 1C MARK 

FIG. 1D PLAY BACK SIGNAL 


FIG. 1E DIFFERENTIAL WAVEFORM 

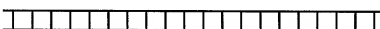
FIG. 1F DETECTION WINDOW 

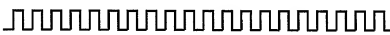
FIG. 1G CHANNEL CLOCK 

FIG. 1H DETECTION DATA 1 0 0 1 0 0 0 1 0 0 0 0 1 0 0 1

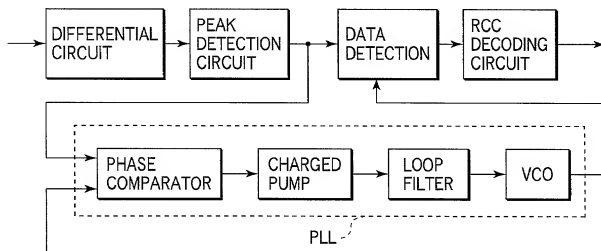


FIG. 2

FIG. 3A RLL CODE1 0 0 1 0 0 0 1 0 0 0 0 1 0 0 1 0

FIG. 3B WRITING SIGNAL

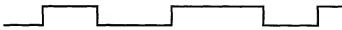


FIG. 3C WRITING BIT ROW
0 0 1 1 1 0 0 0 0 1 1 1 1 1 0 0 0 1 1

FIG. 3D RESPONSE WAVEFORM

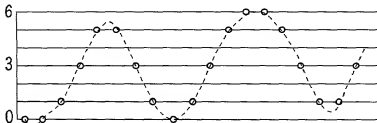


FIG. 3E { SUPER-POSITION OF THE RESPONSE WAVEFORM

0	0	1	2	2	1	1	2	2	1	1	2	2	1						
			1	2	2	1		1	2	2	1		1	2	2	1			
				1	2	2	1			1	2	2	1						
						0			1	2	2	1							
										1	2	2	1						

0	0	1	3	5	5	3	1	0	1	3	5	6	6	5	3	1	1	3

FIG. 3F PLAY BACK WAVEFORM





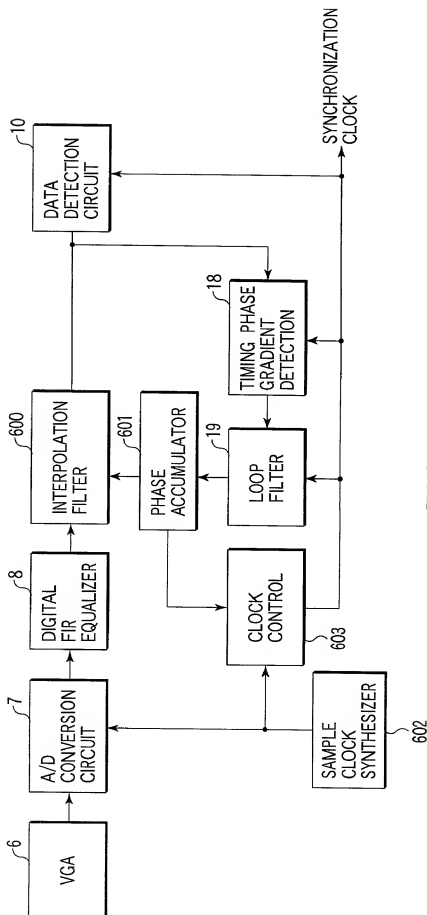


FIG. 5

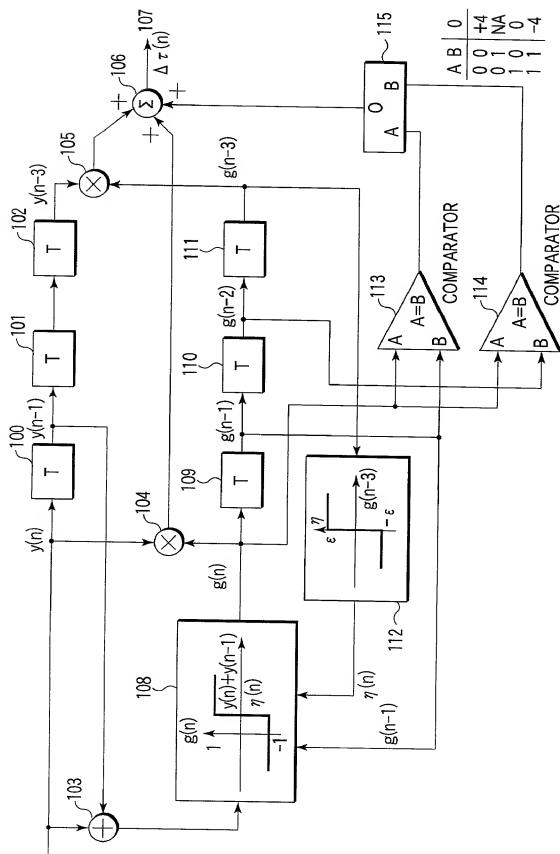


FIG. 6

FIG. 7A RLL CODE1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0.....

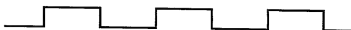
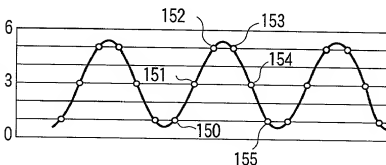
FIG. 7B WRITING SIGNAL 

FIG. 7C WRITING BIT ROW 1 1 1 0 0 0 1 1 1 0 0 0 1 1 1 0 0

FIG. 7D RESPONSE WAVEFORM 

FIG. 7E { SUPER-POSITION OF THE RESPONSE WAVEFORM

0	0	1	2	2	1	1	2	2	1	1	2	2	1						
		1	2	2	1		1	2	2	1		1	2	2	1				
			1	2	2	1			1	2	2	1			1	2	2	1	
0	0	1	3	5	5	3	1	1	3	5	5	3	1	1	3	5	5	3	1

FIG. 7F PLAY BACK WAVEFORM 

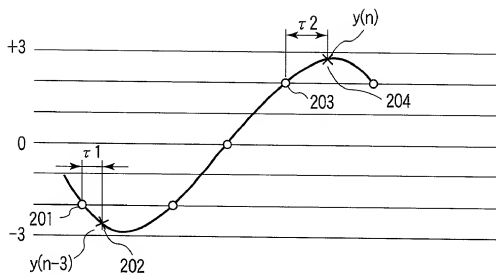


FIG. 8A

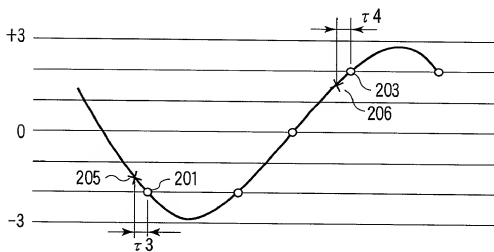


FIG. 8B

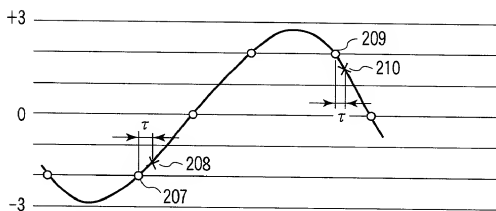


FIG. 9A

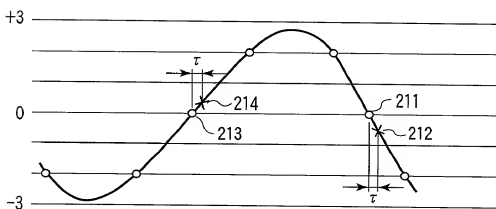


FIG. 9B

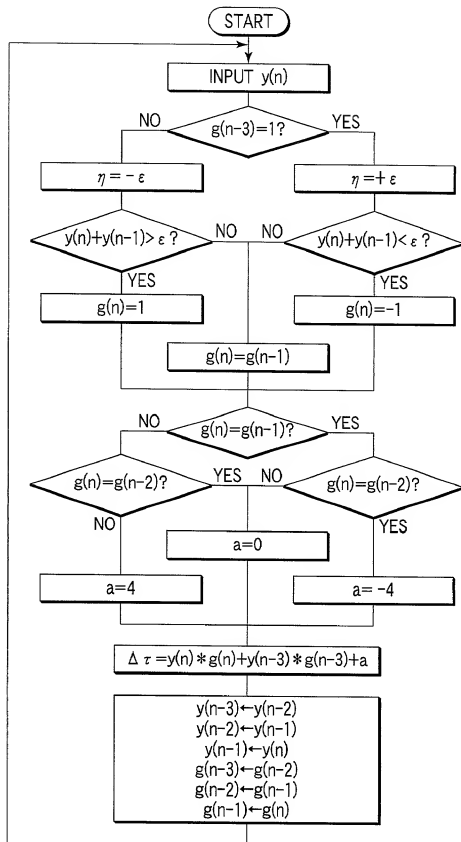


FIG. 10



FIG. 11

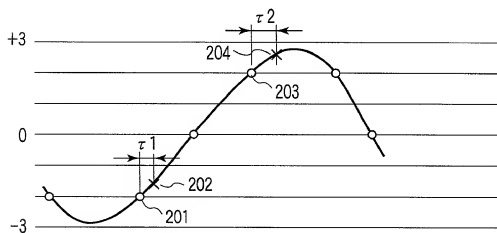


FIG. 12A

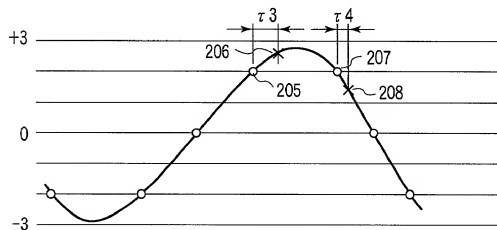


FIG. 12B

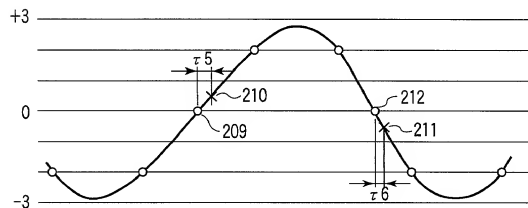


FIG. 13

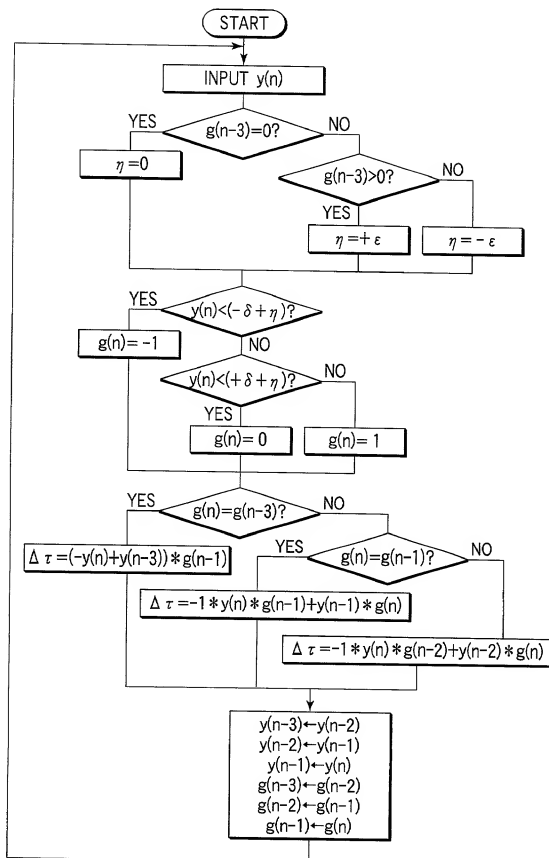


FIG. 14

PR(1,2,2,1)
STATE TRANSITION DIAGRAM
(d=0)

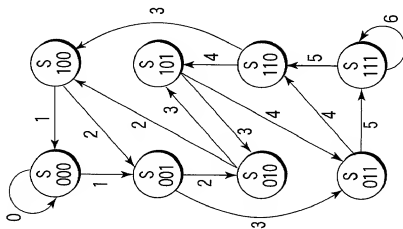


FIG. 15A

PR(1,2,2,1)
STATE TRANSITION DIAGRAM
(d=1)

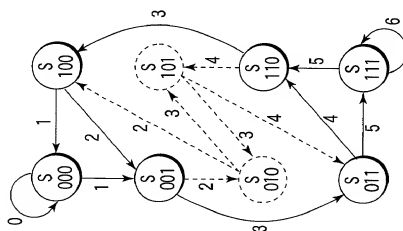


FIG. 15B

PR(1,2,2,1)
STATE TRANSITION DIAGRAM
(d=2)

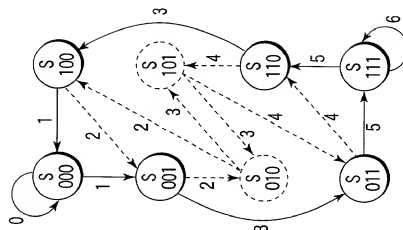


FIG. 15C

FIG. 16A

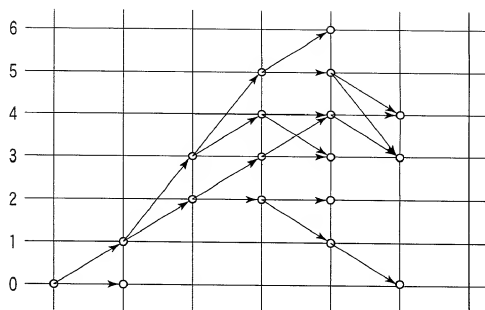


FIG. 16B

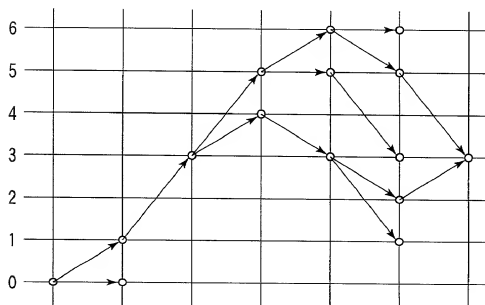
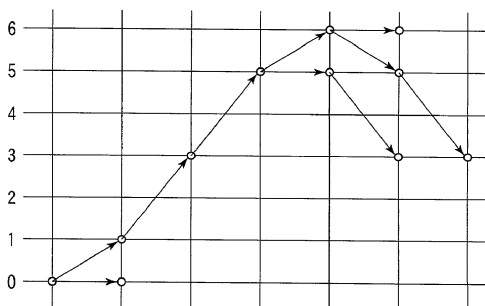


FIG. 17



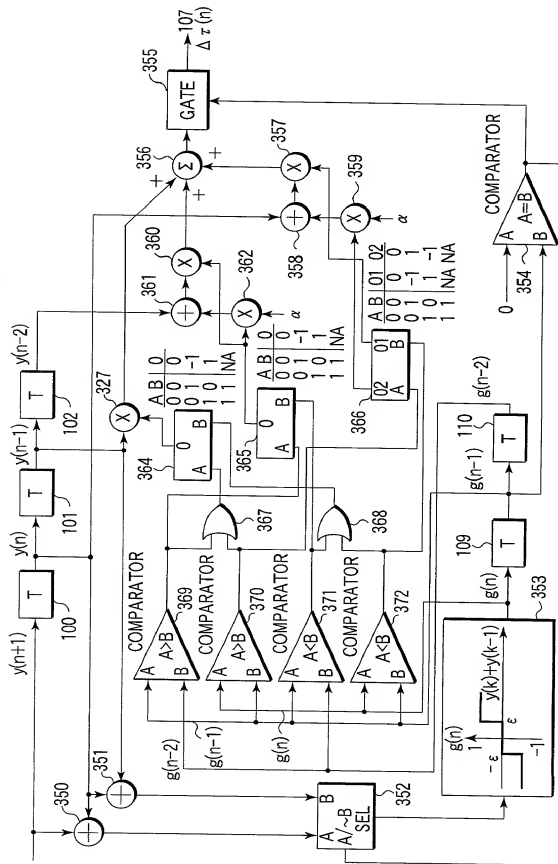


FIG. 18

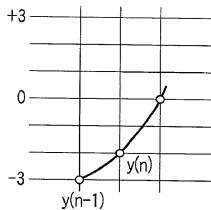


FIG. 19A

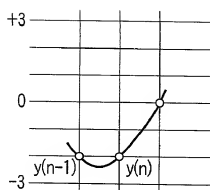


FIG. 19B

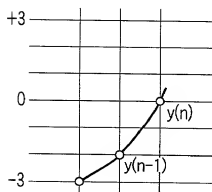


FIG. 19C

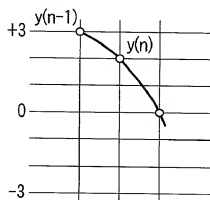


FIG. 19D

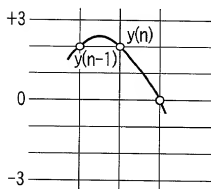


FIG. 19E

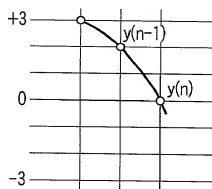


FIG. 19F

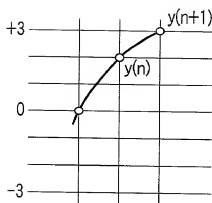


FIG. 20A

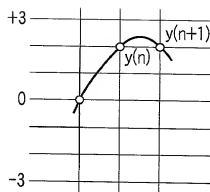


FIG. 20B

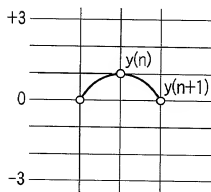


FIG. 20C

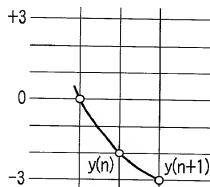


FIG. 20D

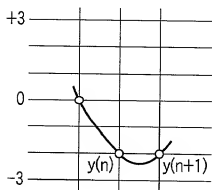


FIG. 20E

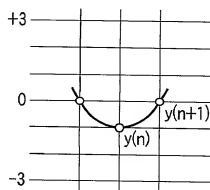


FIG. 20F

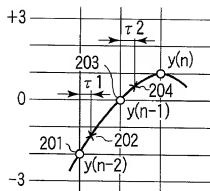


FIG. 21A

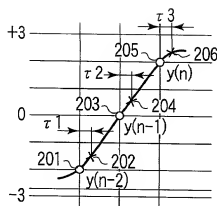


FIG. 21B

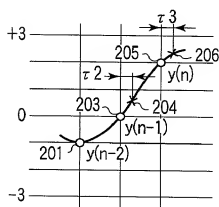


FIG. 21C

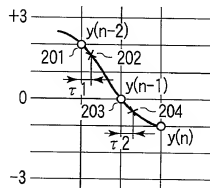


FIG. 21D

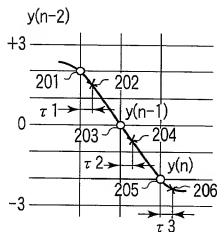


FIG. 21E

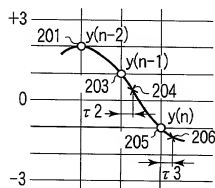


FIG. 21F

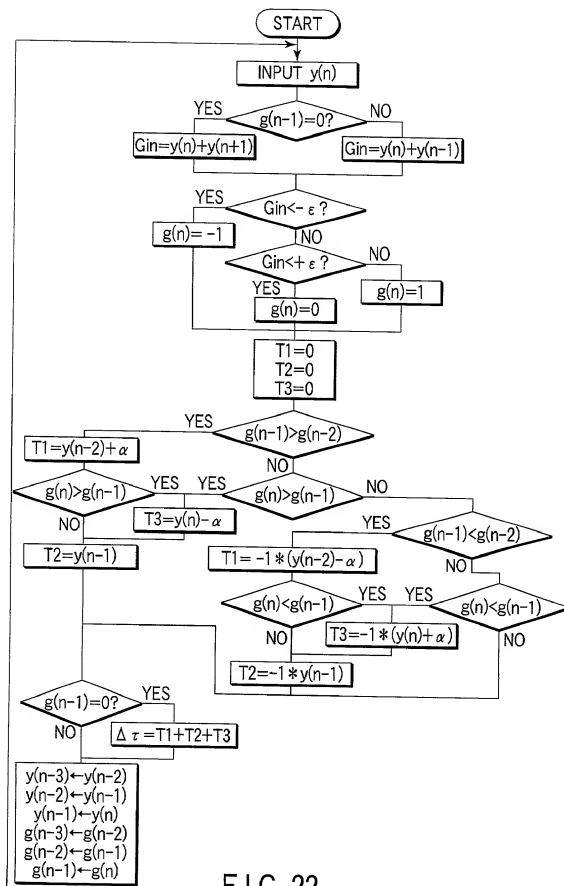


FIG. 22

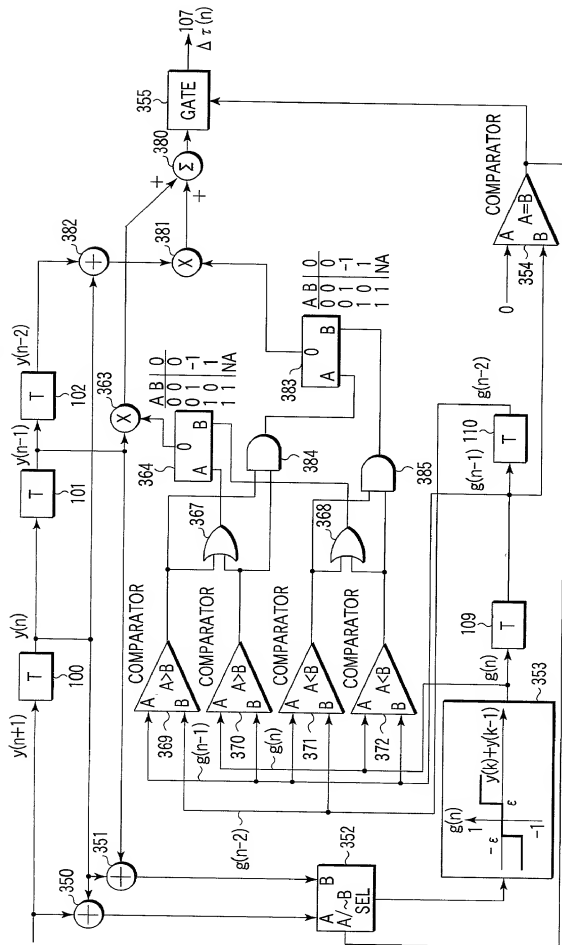


FIG. 23

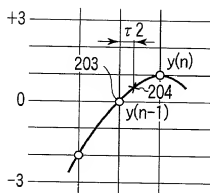


FIG. 24A

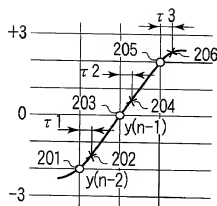


FIG. 24B

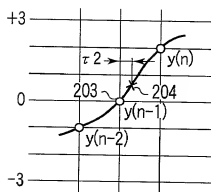


FIG. 24C

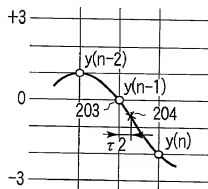


FIG. 24D

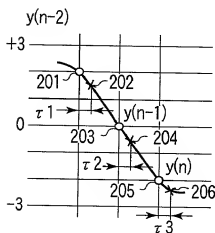


FIG. 24E

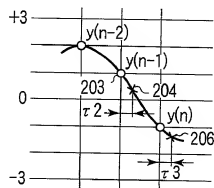


FIG. 24F

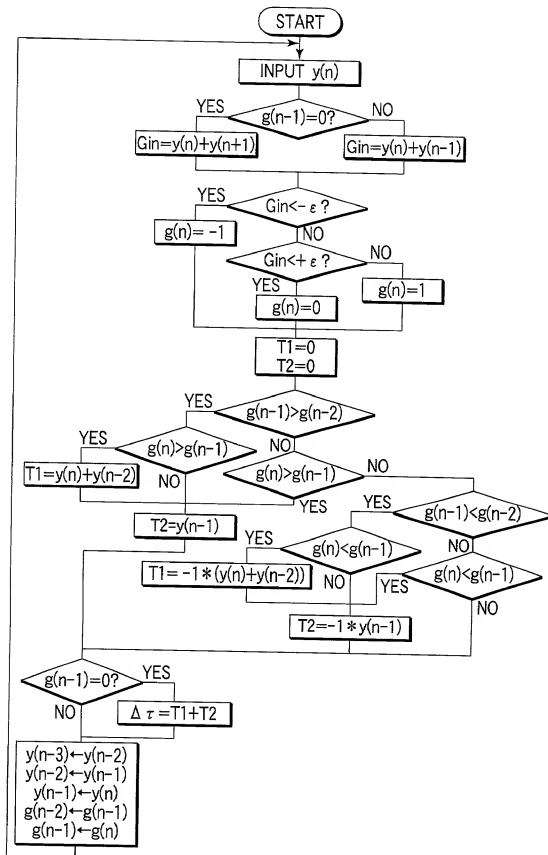


FIG. 25

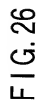


FIG. 26

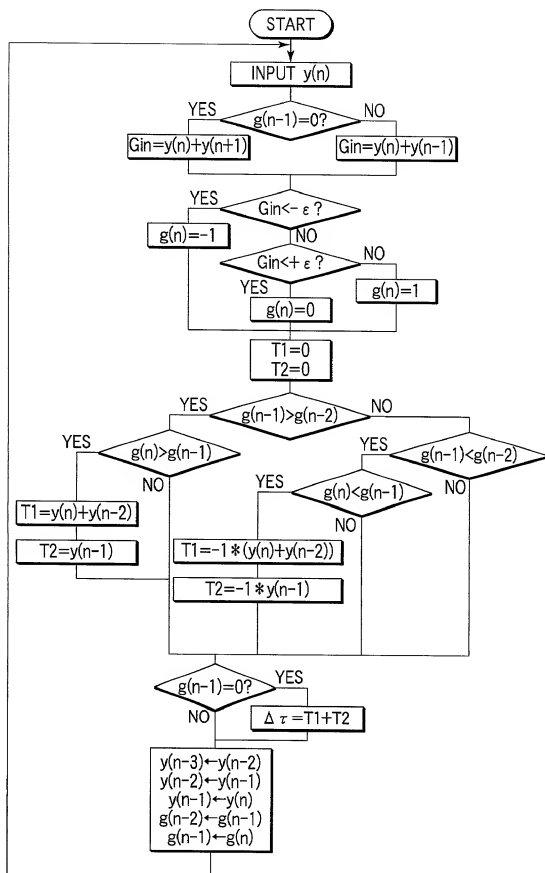


FIG. 27